



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|----------------------------|------------------|
| 09/784,979 | 02/16/2001 | Herman Chien | 113238 | 5256 |
| 7590 | 09/20/2004 | | | |
| Samuel H. Dworesky AT&T CORP. P.O. Box 4110 Middletown, NJ 07748-4110 | | | | |
| | | | EXAMINER PHAM, BRENDA H | |
| | | | ART UNIT 2664 | PAPER NUMBER |

DATE MAILED: 09/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/784,979

Applicant(s)

CHIEN ET AL.

Examiner

Brenda Pham

Art Unit

2664

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 February 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 21 and 22 is/are allowed.
- 6) ☐ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) 8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 February 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

1. Claims 1-22 have been examined.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-2, 9-13, 17 are rejected under 35 U.S.C. 102(e) as being anticipated by LO (US RE37, 301 E).

Claims 1, 9-13, LO discloses a method for controlling traffic in a wireless transmission system wherein information is passed from a remote unit to a base station along a first wireless channel and information is passed from the base station to a remote unit along a second wireless channel, the method comprising the steps of:

dividing a frame of data into a plurality of blocks of data **{(FIG. 2a, MOBILE STATION B, dividing a frame into three words message (25, 27, 29))};**

detecting idle status information from said second wireless channel **{in the forward channel 20, bursts 24 is sent to all mobiles, the FM field is set to 0 indicating to all mobiles that the next reverse channel slot is available for**

contention access (idle status), (column 5, lines 33-40, also see figure 2a, item 24));

when said idle status information indicates said base station is accessible, transmitting a first block of data of said plurality of blocks in a first time slot along said first wireless channel **{Upon receiving burst 24 from the forward channel, mobile station B identifies that the reverse channel is available and sends a burst 25 having a field with the identifier RAA=37 and RM=1 indicating to all mobiles that the next burst is reserved for the mobile with ID 37 (column 5, line 39-44, also see figure 2a, item 25));**

monitoring said second wireless channel for a plurality of time slots; and if one of said time slots indicates that said first block of data has been received by said base unit, transmitting the remaining data blocks from the plurality of data blocks constituting said frame, wherein the transmitting occurs in time slots following the indication that said first block of data has been received **{The next burst 26 sent on the forward channel 20 by the base station includes an acknowledgement field identifier FAA=37 and a reserved field FM=1 indicating to all mobiles that the next burst is reserved for the mobile with ID 37. Upon receiving burst 26, mobile station B identifies that the previous burst was successfully received by the base station and send burst 27, again including the identifier RAA=37 and reserved field RM=1. The base station responds again in the forward channel with a similar burst 28. Mobile station B sends it last burst 29 for that message (column 5, lines 44-53)}.**

Claim 2 LO teaches wherein said plurality of time slots covered a time interval that corresponds to a round trip time between the remote unit and the base unit.

{Figure 2a shows the communications system in LO utilizes plurality of time slots for transmitting signals from the remote unit (mobile B) to the base unit and backs}.

Claim 7, LO further teaches wherein said one of said time slots corresponds to that time slot at the end of said time interval. **{Figure 2 shows time slots, such as 29, at the end of said time interval. Column 5, lines 53-55 teaches that mobile station B sends its last burst 29 for that message. The burst includes the same identifier field RAA=37 but includes a field RM=0 indicating the end of the time interval for communications transmitting between base station and mobile station B and the next reverse channel slot will be available for contention access.}**

Claim 8, LO further teaches wherein if another time slot along said second channel, within said time interval and preceding said one of said time slots has idle status information that indicates that the first channel is busy, then said remote unit delays further data transmission. **{The time slot 26 sent on the forward channel 20 by the base station includes an acknowledgement field identifier FAA=37 and RM=1. A field with RM=1 indicating to all mobiles that the next burst is reserved for the mobile with ID 37. Therefore, all mobiles, except for mobile with ID 37, delays further data transmission (column 5, lines 44-40-50.)}**

Claims 17 and 19, LO discloses a method for improving data flow from a remote unit to a base unit along a data channel, the method comprising the steps of:

Checking an idle status indicator transmitted from the base unit along a second channel; when said indicator indicates that said base unit is accessible, transmitting a first portion of a frame of data from the remote unit to said base unit in a first time slot along said data channel; after transmitting said first portion, examining time slots from said base unit to determine whether the idle status indicator has changed; and delaying transmission of a remainder of said frame of data until said step of examining determines that the idle-status indicator has changed in a round trip time slots that occurs at a time corresponding to a communication round trip time between the remote unit and the base station. **{Upon receiving burst 40 from the base station indicating that the channel is idle, station B sends burst 41 and station C sends burst 42. Since both are sent simultaneously, a collision occurs resulting in destruction of the bursts. At the base station, a stats burst 43 indicating that a collision has occurred is transmitted. Upon receipt of burst 43, transmission from both mobiles is terminated. After a randomly selected delay, both mobile stations will try a retransmission of a burst (column 5,6, lines 65-67, 1-6, respectively.)}**

Claim 19, the method of claim 17 further comprising the step of detecting that the transmitted of first portion was not successfully received by the base station. **{Upon receiving burst 40 from the base station indicating that the channel is idle, station B sends burst 41 and station C sends burst 42. Since both are sent**

simultaneously, a collision occurs resulting in destruction of the bursts. At the base station, a stats burst 43 indicating that a collision has occurred is transmitted. Upon receipt of burst 43, transmission from both mobiles is terminated (column 5,6, lines 65-67, 1-6, respectively, see figure 2b)).

4. Claims 3-6, 14-16 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Lo (US RE37,301 E).

Claims 3-6 and 14-16, as explained in the rejection statement of claims 1 and 9, Lo discloses all the claim limitations recited in claims 1 and 9 (parent claims).

Although LO does not discuss a round trip time accounts for signal propagation delay; signal processing during the communication transmission, such as that recited in claims 3-6 and 14-16, in any telecommunication process, the time accounts for signal processing and transmission propagation delay is inherently included in a round trip transmission time because of the transmission delay during signal formatting and propagation for communication transmission.

Claim 18 LO further teaches the step of detecting that a transmission for another remote unit occurred prior to the step of transmitting by noting a change in idle status in a time slot that precedes said round trip time slot.

{LO teaches that the burst 26 sent on the forward channel 20 by the base station includes an acknowledgement field identifier FAA=37 and a reserved field FM=1 indicating to all mobiles (another remote unit) that the next burst is

Art Unit: 2664

reserved for the mobile with ID 37. The change in idle status from RM=0 of time slot 24 to RM=1 of time slot 26 (shows in figure 2a).}

Claim 20 LO teach in according to figure 2a, that the round trip time slot (25 and 27) provides information that the idle-status indicator has not changed. **{Figure 2A shows both of the time slot 25 and 27 indicated RM=1, which indicated that the mobile station still have more message to transmit.}**

Allowable Subject Matter

5. Claims 21-22 are allowed over prior art.

The prior art further fails to teach in combination wherein when said first remote unit receives a round trip time slot that occurs at a round-trip time after transmitting the first portion and said round trip time slot has an idle status indicator that indicates a busy status and a decode indicator that indicates that the base unit successfully decoded said first portion, said first remote unit transmits a remainder of said data package in a plurality of subsequent time slot.

Art Unit: 2664

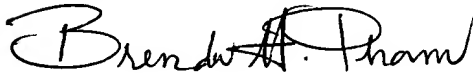
Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brenda Pham whose telephone number is (571) 272-3135. The examiner can normally be reached on Monday-Friday from 9:00 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin, can be reached on (571) 272-3134.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2600.

Brenda Pham
September 12, 2004

A handwritten signature in black ink that reads "Brenda A. Pham". The signature is written in a cursive style with a large, stylized initial "B".